APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/646,194	09/14/2000	Hisashi Saiga	55051(1117)	5757

21874   7590   05/12/2009
EDWARDS ANGELL PALMER & DODGE LLP
P.O. BOX 55874
BOSTON, MA 02205

EXAMINER
BASOM, BLAINE T

ART UNIT	PAPER NUMBER
2173	

MAIL DATE	DELIVERY MODE
05/12/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/646,194	SAIGA ET AL.
	Examiner	Art Unit	
	Blaine Basom	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 January 2009</u>.
2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>28,31-38,41-47,50 and 53-55</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>28,31-38,41-47,50 and 53-55</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>10/31/2008</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

This Office Action is responsive to the Applicants' submission, received on January 22, 2009, by which claims 28, 31, 36, 37, 38, 46, 47, 50, 53, and 55 are amended, and claims 48, 49, 51, and 52 are cancelled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 28, 31, 33-38, 41, and 43-47, 50, and 53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over the "Portable Document Format Reference Manual, Version 1.2," which is attributed to Bienz et al. (and hereafter referred to as "Bienz"), over U.S. Patent No.

5,634,064 to Warnock et al. (hereinafter "Warnock"), and also over U.S. Patent No. 6,599,324 to

Saito et al. (hereinafter "Saito").

In general, Bienz describes the Portable Document Format (PDF), a file format used to

specify electronic documents such that the documents are easily and reliably exchanged and

viewed (see section 2.1, on page 27). Such PDF documents are stored as files (see section 2.3.2,

on page 30), which are understandably maintained in computer memory. As described below,

each of these files comprises data to be displayed, in addition to all the display information and

scroll display control information necessary for the display of the data. Each of these PDF files

is consequently considered a "pre-specified unit," like recited in the claimed invention.

Therefore, computer memory having one or more PDF files stored thereon is considered a data

storing medium with display data recorded thereon, wherein the display data is recorded in the

form of pre-specified units.

Specifically regarding claims 28 and 38, a PDF file describes a document, and comprises

all of the information necessary to display the document. For example, Bienz discloses that a

PDF document is implemented by a hierarchy of objects included within a PDF file (see section

6.1 on page 71). In particular, each page of the document is realized by a corresponding "Page

object," the Page object being efficiently accessed through a "Pages tree" structure (see section

6.3, beginning on page 75). Each Page object describes the content and functionality of a single

document page (see section 6.4, beginning on page 77), and particularly comprises a "Contents"

parameter, which references the page description of its corresponding document page (see

section 6.4, on page 78). It is understood that this page description comprises a series of graphic

objects, considered display elements and image data objects like recited in claims 28 and 38,

respectively, which are displayed within the associated document page (for example, section 8.1

beginning on page 209).

In addition to all the necessary display data, a PDF file comprises all the information

necessary to scroll the document. For example, Bienz discloses that a PDF file may define one

or more article "threads," each comprising one or more "beads" (see section 6.12 beginning on

page 111). An article bead is associated with a distinct section of an article, whereby a plurality

of such beads may be linked into a common thread, so that a user may read an entire article by

scrolling from one article bead to the next, rather than from one page to the next (see section

6.12, beginning on page 111). In particular, each bead includes an "R" parameter, which

identifies the page location on which its associated article content (i.e. graphic objects) appears

(see Table 6.44 on page 112). It is apparent that this page location is specified in a coordinate

system according to the coordinate values assigned to the article content, since the R parameter is

denoted by 4 values that identify the coordinates of the corners of the rectangle surrounding the

associated article content (see section 7.1 on page 133). Each article bead is thus specified by a

rectangle, or in other words, by two sets of line segments having different directions in a

coordinate system - two parallel line segments extending in a first direction, and two parallel line

segments extending in a second, transverse direction. The coordinate values denote the starting

and ending points of these line segments. Additionally, each bead includes a "T" parameter, a

"V" parameter, and an "N" parameter, which respectively identify the thread on which the bead

belongs, the previous bead in the thread, and the next bead in the thread (see Table 6.44 on page

112). The beads are accordingly linked into a common thread such that a user may scroll from

bead to bead, i.e. article section to article section, in order to read an entire article. It is apparent

that in doing so, the above-described T, V, and N parameters are used to move from one bead to the next, whereby for each bead, the above-described R parameters reference the bead's associated article content (for example, see section 6.12 on page 111). Consequently, as a thread is formed by a plurality of intervals, namely beads, which are specified by line segments having different directions in a coordinate section defined by the PDF file, a thread is considered a scroll path along which scrolling through a document is to be conducted.

Bienz thus presents a pre-specified unit of display data (i.e. a PDF file), which includes (i) a series of display elements (e.g. graphic objects) for display by the display device, and (ii) management elements associated with the display elements, the management elements including all information necessary for the display device to display a predetermined sequence of said display elements as a scroll display, and wherein the predetermined sequence of the display elements includes an interval (i.e. bead) or intervals that sequentially together form a scroll path (i.e. thread), each interval being specified by line segments defined by coordinate values of a starting point and an ending point in a coordinate system defined by the pre-specified unit corresponding to coordinate values assigned to the display elements in the pre-specified unit., as is claimed. Bienz, however, does not explicitly disclose that the display elements forming the intervals defining the scroll path are respectively *sequentially* displayed from the starting point to the end point thereof as the scroll path is displayed by the display device, as is required by claims 28 and 38. Moreover, Bienz fails to explicitly disclose that a plurality of such pre-specified units, i.e. PDF files, may be used together to define a single complete document, as is expressed in claims 28 and 38.

Like Bienz, Warnock describes linking a plurality of article sections into a common thread, so that a user may read an entire article by scrolling from one article section to the next, rather than from one page to the next (see e.g. column 2, line 29 – column 3, line 2; and column 12, lines 10-45). Warnock further discloses that when each section is displayed, the section is automatically panned and zoomed to fit within a display window (see e.g. column 9, lines 41-55; and column 10, line 56 - column 11, line 25). Warnock suggests that an entire section may not be displayed at the appropriate zoom level within a window, and as a result, the section is displayed *sequentially* from a starting point to an ending point defined by the bounds of the article section while the user scrolls through a thread (see e.g. column 6, lines 55-65; and column 10, line 56 - column 11, line 63).

It would have been obvious to one of ordinary skill in the art, having the teachings of Bienz and Warnock before him at the time the invention was made, to modify the display of each article section taught by Bienz such that it is panned and zoomed like done by Warnock, which can result in the display elements (i.e. article sections) forming the intervals being respectively sequentially displayed from their starting point to their end point as the scroll path is displayed. It would have been advantageous to one of ordinary skill to utilize such panning and zooming, because it enhances readability, as is taught by Warnock (see e.g. column 9, lines 41-55).

Moreover, composing a single complete document via a plurality of separate files is well known in the art. For example, Saito suggests that an single complete document can be defined by a plurality of separate files, with each file defining a separate part of the document (see e.g. column 1, lines 22-50; and column 2, lines 32-38). Saito teaches that by composing a single

document using a plurality of separate files, different access rights can be specified for different

portions of the document (see e.g. column 1, lines 22-50; and column 2, lines 32-38).

Accordingly, it would have been obvious to one of ordinary skill in the art, having the

teachings of Bienz, Warnock, and Saito before him at the time the invention was made, to

implement the PDF format taught by Bienz and Warnock to create a plurality of PDF files, each

describing a single portion of a document, like taught by Saito. It would have been advantageous

to one of ordinary skill to utilize such a combination, because it would allow the user to specify

different access rights for different portions of the document, as is suggested by Saito.

Accordingly, Bienz, Warnock, and Saito are considered to teach – to one of ordinary skill in the

art – a data storage medium (i.e. computer memory) like that of claim 28, which is for use with a

display device, the data storage medium having recorded thereon a plurality of pre-specified data

units (i.e. PDF files) that together define a single complete document recorded thereon.

Similarly, Bienz, Warnock, and Saito teach a data storage medium like that of claim 38, the data

storage medium having display data associated with a single complete document recorded

thereon, the display data including a plurality of image data objects for display on a display

screen of a display device and all management information associated with each of the image

data objects required by the display device for scroll display, thereof.

As per claim 31, Bienz discloses that a PDF document may display a link, similar to a

hypertext link, which may be selected to display a thread of the same PDF document, or of a

different PDF document (see section 6.9 beginning on page 96, and particularly section 6.9.5

beginning on page 101). It is understood that a user may encounter such a link when reading

through an article thread (e.g. at the end of an article thread), and that the user may select the link

in order to display another article thread referenced by the link, starting at the beginning of the

other article thread. The predetermined sequence of display elements can thereby include linking

means for causing a display device to link an end point of a first scroll display path (i.e. thread)

with a starting point of another scroll display path, like claimed.

As per claim 41, Bienz discloses that a PDF document may display a link, similar to a

hypertext link, which may be selected to display a thread of the same PDF document, or of a

different PDF document (see section 6.9 beginning on page 96, and particularly section 6.9.5

beginning on page 101). It is understood that a user may encounter such a link when reading

through an article thread, and that the user may select the link in order to display another article

thread referenced by the link. Such a link is thus considered information for linking with another

scroll display path, i.e. thread, and Bienz is therefore considered to teach that the management

information associated with image data objects may contain information for linking a scroll

display of selected ones or contiguous groups of image data objects contained in that file with

selected ones or contiguous groups of image data objects located on a scroll display path

contained in at least another distinct file.

Referring to claims 33 and 43, the article beads of Bienz are considered to constitute

"scroll display control information," as is described above in the paragraphs regarding claims 28

and 38. As further shown above, each bead includes an R parameter, which delineates a specific

article section by means of four coordinate values, these coordinate values defining a rectangle.

The beads are linked into a common thread so that a user may scroll from bead to bead in order

to read an entire article, whereby for each bead, the content bounded by this rectangle is

displayed at an appropriate zoom level (for example, see section 6.12 on page 111). Thus the

management elements taught by Bienz include management elements associated with selected

areas of the coordinate system defined by the PDF file.

As per claims 34 and 44 the article beads described by Bienz are considered to constitute

"scroll display control information," as is described above in the paragraphs regarding claims 28

and 38. Each bead includes an R parameter, which as shown above, delineates specific

document content by means of four coordinate values, these coordinate values defining a

rectangle about the content. The beads are linked into a common thread so that a user may scroll

from bead to bead in order to read an entire article, whereby for each bead, the content bounded

by this rectangle is displayed at an appropriate zoom level (for example, see section 6.12 on page

111). Consequently, it is understood that the size of such a rectangle affects the amount of zoom

for the document content referenced by the bead; for example, if the rectangle is the size of an

entire page, the document content may not be zoomed much, whereas if the rectangle is much

smaller, the document content may be enlarged more significantly. Thus the scroll display

control information taught by Bienz includes information, specifically the rectangle identified by

the R parameter, which intrinsically specifies a scale of enlargement or reduction of a display

area for scroll display.

As per claims 35 and 45, the B parameter of Bienz, and its referenced article beads, are

considered "scroll display control information," as is described above in the paragraphs

regarding claims 28 and 38. Such an article bead includes an R parameter, which as shown

above, references specific document content by means of four coordinate values, these

coordinate values defining a rectangle about the document content. Regarding the claimed

invention, Bienz discloses that PDF documents may include movies and sounds (see section 1.3

on page 20). It is therefore understood that the document content referenced by the above-described R parameter may comprise movies and/or sounds. Consequently, the scroll display control information taught by Bienz can include synchronous reproduction information, namely the R parameter, which specifies data content to be reproduced in synchronism with the scroll display, and wherein this data content may comprise non-motionless data such as sound and/or moving images.

In reference to claims 36 and 46, Bienz discloses that a computer is used for reproducing and displaying a PDF document (for example, see section 2.2 on page 28). As described above, such a PDF document is stored in a storage medium and is scrolled based on the above-described scroll display control information. Such a computer presenting the PDF document described by Bienz is therefore considered a "display device," like that recited in claims 36 and 46.

As per claims 54 and 55, the article beads described by Bienz are considered to constitute "scroll display control information," as is described above in the paragraphs regarding claims 28 and 38. Each bead includes an R parameter, which as shown above, delineates specific document content by means of four coordinate values, these coordinate values defining a rectangle about the content. The beads are linked into a common thread so that a user may scroll from bead to bead in order to read an entire article, whereby for each bead, the content bounded by this rectangle is displayed at an appropriate zoom level (for example, see section 6.12 on page 111). Consequently, it is understood that the size of such a rectangle affects the amount of zoom for the document content referenced by the bead; for example, if the rectangle is the size of an entire page, the document content may not be zoomed much, whereas if the rectangle is much smaller, the document content may be enlarged more significantly. Thus the scroll display

control information taught by Bienz includes information, specifically the rectangle identified by

the R parameter, which intrinsically specifies a scale of enlargement or reduction of a display

area for scroll display.

Regarding claims 50 and 53, Bienz discloses that a PDF file can define one or more

article "threads," each comprising one or more "beads" (see section 6.12 beginning on page

111). Such beads are considered "intervals" like those of the claimed invention, as is asserted

above. Bienz further discloses that each bead is identified by an "R" parameter, which specifies

the page location on which its associated article content (i.e. graphic objects) appears (see Table

6.44 on page 112). This page location is specified in a coordinate system according to the

coordinate values assigned to the article content of the bead; the R parameter includes four

coordinate values, which specify the lower left (i.e. ending) and upper right (i.e. starting) corners

of the rectangle surrounding the associated article content (see section 7.1 on page 133).

Furthermore, Bienz discloses that each bead includes a "V" parameter and an "N" parameter,

which respectively identify the previous bead in the thread and the next bead in the thread (see

Table 6.44 on page 112). Such V and N parameters are considered "vectors" like those of the

present application, since they generally specify a direction (i.e. a next bead) to which to scroll.

Accordingly, Bienz teaches vectors (i.e. V and N parameters) that connect the intervals of the

scroll path, wherein a display device conducts a sequential display of the predetermined

sequence of display elements along each of the sequence of intervals in the scroll path as

determined by the vectors.

Regarding claims 37 and 47, Bienz does not explicitly disclose that the scroll display is

conducted only while a user instructs a display controller to perform the scroll display in either a

forward or backward direction along a selected scroll path (i.e. thread), as is expressed in claims

37 and 47. Nevertheless, Warnock discusses documents which may comprise one or more

articles, each article having sections on different pages of the document, whereby a thread may

be created so that a user may read an entire article by scrolling from one article section to the

next, rather than from one page to the next (see column 2, line 30 – column 3, line 31). When

displayed, each article section is automatically zoomed to fit within the display window, yet may

still require scrolling if the length of the article section, for example, does not fit within the

window (see column 10, line 56- column 11, line 36). Particularly, each article section is

displayed at either the beginning of the section and scrolled toward the end of the section, or

displayed at the end of the section and scrolled toward the beginning (see column 11, line 31 –

column 12, line 9). Regarding the claimed invention, Warnock teaches that the PDF document is

scrolled only while the user instructs the computer to scroll the document in either the forward or

backward directions along a thread (for example, see column 2, lines 38-55; and column 10, line

56 – column 12, line 9). It would have been obvious to one of ordinary skill in the art, having

the teachings of Bienz, Saito, and Warnock before him at the time the invention was made, to

further modify a display device displaying the PDF-formatted document taught by Bienz,

Warnock, and Saito, such that the PDF document is scrolled only while the user instructs the

device to scroll the document in either the forward or backward directions along a thread, as is

done by Warnock. It would have been advantageous to one of ordinary skill to utilize this

combination, because such scrolling in response to user input provides the user more control

over the display of the document, as is demonstrated by Warnock.

Claims 32 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over the

combination of Bienz, Warnock, and Saito, which is described above, and also over Japanese

Patent No. 5-323941, which is attributed to Michihiro Ota (and hereafter referred to as "Ota").

As described above, Bienz, Warnock, and Saito teach a data storage medium with display data

recorded thereon, wherein like recited in claim 38, the display data is provided with all the

necessary information for scroll display on a display screen. This information for scroll display

comprises a plurality of beads denoting article sections, which as described above, may be linked

into a common thread, so that a user may read an entire article by scrolling from one article bead

to the next, rather than from one page to the next (see section 6.12, beginning on page 111).

Bienz, Warnock, and Saito, however, do not explicitly disclose that this information for scroll

display includes information specifying a scroll display speed, as is expressed in claims 32 and

42.

Like Bienz, Ota discloses a method for presenting a document on a display screen,

whereby the document can be scrolled. Regarding the claimed invention, Ota teaches that the

scroll speed may be varied according to the number of characters displayed (see the abstract of

Ota). Consequently it is understood that the document described by Ota is associated with

information for scroll display, wherein this information for scroll display includes information on

a scroll display speed.

It would have therefore been obvious to one of ordinary skill in the art, having the

teachings of Bienz, Warnock, Saito, and Ota before him at the time the invention was made, to

modify the information for scroll display taught by Bienz, Warnock, and Saito such that the

articles may be scrolled at a rate proportional to the number of characters displayed, as is taught

by Ota. It would have been advantageous to one of ordinary skill to utilize such a combination

because the resulting document scrolling speed would match the document reading speed of a

user, as is taught by Ota (see the abstract of Ota). This is a desirable attribute for a document

displaying system. Thus with this combination of Bienz, Warnock, Saito, and Ota, the beads of

an article thread are each scrolled at a rate proportional to the number of characters displayed in

the article section associated with each bead. In other words, the content of the article section

implicitly specifies the scroll display speed of that section. The content of such an article section

is determined by the P and R parameters of the bead associated with that article section, as is

described above in the rejection for claims 28-29 and 38-39. Thus the P and R parameters of

each bead specifies the content of an article section, which in turn includes information (namely

the characters displayed in that article section) that determines the scroll display speed, and

therefore, the P and R parameters are understood to inherently include information specifying the

scroll display speed. Consequently with this combination of Bienz, Warnock, Saito, and Ota, the

scroll display control information includes information specifying a scroll display speed.

Response to Arguments

The Examiner acknowledges the Applicants' amendments to claims 28, 31, 36, 37, 38,

46, 47, 50, 53, and 55, and the Applicants' cancellation of claims 48, 49, 51, and 52.

Regarding the pending claims, the Applicants argue that the PDF Manual ("Portable

Document Format Reference Manual, Version 1.2," which is attributed to Bienz et al.) fails to

teach distinct, separately controllable pre-specified units (i.e. distinct files) containing only a

portion of all of the display data associated with a document, as is claimed. In response, the

Examiner respectfully submits that Saito teaches defining a single complete document via a

plurality of separate files, with each file defining a separate part of the document (see e.g.

column 1, lines 22-50; and column 2, lines 32-38). Saito teaches that by composing a single

document using a plurality of separate files, different access rights can be specified for different

portions of the document (see e.g. column 1, lines 22-50; and column 2, lines 32-38). The

Examiner thus respectfully submits that the PDF Manual and Saito, *in combination*, teach

distinct, separately controllable pre-specified units (i.e. distinct files) containing only a portion of

all of the display data associated with a document, as is claimed.

Further regarding the pending claims, the Applicants argue that the presently claimed

"scroll path" is distinguished from the scroll path taught by Bienz (i.e. the PDF Reference

Manual). The Applicants argue that the "scroll path" of the claimed invention is the actual

content of a prescribed path from display element to display element, not from block of display

elements to block of display elements as in the PDF Reference Manual, i.e. the scroll path of the

present invention is directed to the sequential display of words that make up the text of an article

of interests, as apposed to the sequential display of blocks of text as in the PDF Manual. These

arguments have been considered, but are moot in view of the new grounds of rejection presented

hereinabove, which are required in response to the Applicants' amendments.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Blaine Basom whose telephone number is (571)272-4044. The

examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kieu Vu can be reached on (571)272-4057. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BTB/
5/11/2009

/Kieu Vu/
Supervisory Patent Examiner, Art Unit 2173